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UNITED STATES DEPARTMENT OF AGRICULTURE
Agricultural Research Administration
Bureau of Entomology and Plant Quarantine
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STATEMENT ON 1949 JAPANESE BEETLE COLLECTIONS AND PROPOSED 1950 QUARANTINE PROGRAM

Trap-scouting and inspections for Japanese beetles during 1949 in non-regulated territory showed little change in the general situation, other than the discovery of a general occurrence of beetles north of Wilmington, in southeastern North Carolina; and the finding, during intensive trapping in West Virginia of a number of sizeable first-record infestations.

A report of trapping and scouting operations during 1949 is included as part of this statement. This shows positive results in cities, towns, airfields and plant-growing establishments outside Federal and State regulated areas. Also included is a summary of all beetle collections made in such areas during the past five years, with indications of those localities in which either DDT foliage or soil treatments were made during this period.

The same coordinated, cooperative program as carried out in previous years was continued in 1949 and is the basis for the 1950 program. The procedures under such a program provide, within available funds, more effective protection of uninfested areas than would be attained by extension of the Federal quarantine alone. It provides a satisfactory basis for stimulating cooperative effort to combat the beetle and gives protection from natural spread and approximate safeguards on the movement of commodities which may carry the pest.

Contemplated extensions of federal regulated area include three towns in Monroe County, one in Tompkins County, and two in Warren County, New York; township of Newport, Washington County, Ohio; county of Alleghany, a number of magisterial districts in Albermarle, Botetourt, Campbell, Henry, Pulaski, Roanoke, and Washington counties, as well as the independent city of Clifton Forge, Virginia; together with the counties of Doddridge, Pleasants, and Ritchie, all non-regulated portions of Marshall, Tyler, and Wetzel counties, and several magisterial districts in Randolph and Wood counties, West Virginia.

Measures taken or proposed by other states to combat and safeguard infestations detected during the year, together with prompt use of soil treatments and foliage sprays next season as may be required, justify continuance of the cooperative arrangements without any extension of the Federal quarantine.

The above statement and the attached report are distributed for the information of those interested in and concerned with the Japanese beetle control program. Together they supply information in addition to that which will be given in a "Notice of Proposed Rule Making" concerning the proposed changes that will shortly be published in the Federal Register.

Avery S. Hoyt
Acting Chief of Bureau

REPORT OF JAPANESE BEETLE SCOUT INSPECTION OUTSIDE
FEDERAL REGULATED AREAS - 1949

During the 1949 Japanese beetle season, trap-scouting inspections were conducted in 36 states outside of the Federally regulated areas. No inspections were made in six states west of the Mississippi River. Many of these inspections were made with the cooperation of State officials, other Bureau field stations and military personnel at airfields. Trapping was done in 218 towns and 104 airports in 31 states. A total of 2,233 plant growing establishments and 149 additional sites, such as airports, freight terminals, cemeteries, and roadside areas, in 1,047 localities were scouted in 18 states. In addition to the above areas, personnel of the White-fringed beetle project scouted for the Japanese beetles in 419 counties in 13 states. Approximately 33,300 traps were operated in 1949 as compared with 44,000 in 1948 when trap-scouting was conducted in 956 localities and 138 airfields in 43 states.

Adult beetles were collected in 101 localities in 14 states. First-record finds of a single beetle each were reported from seven localities in 6 states; and first-record collections of from two to numerous (over 500 beetles, no count taken) beetles were made in 25 localities in 9 states. Of the 101 localities where beetles were collected, 30 towns are within the area proposed to be added to the Federally regulated area. In the remaining localities, the finds were insignificant or DDT control measures were applied. These areas will be reinspected in 1950 and in some areas control measures will be repeated.

Beetles were collected at only two of the 104 airfields trapped. Twenty-eight beetles were found on the Atlanta, Georgia airport and DDT foliage treatment was applied. One beetle was found on the Olathe, Kansas airbase; no treatment was applied at this base.

From one to twelve beetles were collected on eleven plant-growing establishments outside of the areas it is proposed to include in the Federal regulated area. Six of these are in Ohio, two in Kentucky, two in Virginia, and one in New York. All of these establishments are operating under signed state quarantine agreements under Federal supervision.

DDT foliage treatments using Federal and State-owned mist blowers were applied in 58 localities in six states. Repeat applications were made in many of these localities.

DDT soil treatments were applied to approximately 530 acres in 22 localities in 8 states. Ten acres were treated with DDT in Richmond, Ind., in the spring of 1949. The only lead arsenate used in 1949 was applied as a soil treatment to 20 acres in Detroit, Mich. In 1948, treatments were applied to 1,050 acres in 26 localities in 7 states. West Virginia has completed plans to treat about 25 acres in three towns in May 1950.

West of the Mississippi River scout inspection was carried on in 15 states. Seventy military and commercial airfields were trapped by Bureau field station, air force, and state personnel. One beetle was found at the Olathe Airbase in Kansas. Twenty-six beetles were collected in St. Louis, two in Robertson and one in Bridgeton, Mo. DDT soil treatment was applied to 35 acres in the St. Louis area. In 70 localities in Missouri, 209 plant-growing establishments were scouted with negative results. White-fringed beetle personnel scouted for the Japanese beetle in conjunction with their regular scouting in Arkansas, Louisiana, Missouri and Texas with negative results.

In the southern area, south of the Federally quarantined states, beetles were collected on one of the 29 airfields surveyed, three towns in Georgia, three towns in Kentucky, one in North Carolina, and one in Tennessee. In 246 localities in Alabama, Kentucky, Mississippi, North Carolina and Tennessee, 318 plant-growing establishments and 77 additional areas were scouted with negative results. White-fringed beetle personnel scouted for the Japanese beetle in conjunction with their regular scouting in Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee.

In Georgia 28 beetles were collected at the Atlanta Airport, and 31 in the city. They were also found in Austell and Dahlenega. DDT foliage treatments were applied to these areas during the summer.

In Kentucky five beetles were collected on a plant-growing establishment in Shively, one beetle on another nursery across the road and one on adjacent property. DDT soil treatments were applied to 24 acres, including nursery premises, and state quarantine agreements have been signed by these establishments. One beetle was found in Covington and one in Dayton.

In Bristol, Tenn., 6 beetles were collected. This was the only location in the State where beetles were found this year.

North Carolina. The available funds and personnel were used this year to survey the rural areas and plant-growing establishments rather than following the usual practice of trapping the cities and towns. Soil treatments have been applied since 1939 in 33 cities and towns where beetles have been collected. No soil treatments were applied in 1949. The cities of Durham, Gastonia and Raleigh were soil treated with DDT in 1947 and 1948; Reidsville and West Jefferson were treated with DDT in 1948. All plant-growing establishments in and around these cities were scouted in 1949 with negative results. Repeat foliage treatments were applied in Asheville, Hendersonville, Calypso, Mt. Olive, Pantego and Castle Haynes, using power mist blowers. In the Pantego area the State of North Carolina hired a plane in June, to cover hedge rows that could not be reached by mist blowers. A 10% DDT dust was used at the rate of 5 lbs. per acre, which was later increased to 10 lbs. per acre. Approximately 120 miles of hedge rows were dusted by plane. It is planned to retreat this area by plane in 1950.

The North Carolina Department of Agriculture has a state Japanese beetle quarantine paralleling the Federal quarantine. Their regulated area controls the following sections of the State: Beaufort County north of the Pamlico River; Duplin, Sampson, and part of Wayne and Harnett Counties; the area between Greensboro, Winston-Salem, Thomasville and High Point; Salisbury, Charlotte, Blowing Rock, and Buncombe and Henderson Counties. The State has added New Hanover and Pender Counties to the regulated area since the first of the year. Beetles were numerous in several farm locations in this latter section, which is just south of the present regulated area around Mt. Olive and Calypso. The State quarantine is supervised by a resident Federal inspector and State inspectors. It is proposed to add seasonal inspectors in the eastern area.

Listed on the attached table are localities in North Carolina where beetles have been collected outside of the State regulated areas.

The mid-West area showed four localities in Illinois, 5 in Indiana, and 6 in Michigan, where beetles were collected. In 215 localities in Illinois, Indiana, Michigan and Minnesota, 340 plant-growing establishments and 26 additional areas were scouted with negative results. White-fringed beetle personnel scouted for the Japanese beetle in conjunction with their regular scouting in special locations in Illinois.

Illinois. Beetle collections in Chicago were reduced to 62 as compared with 86 in 1948. Other collections were Decatur, a first-record, with 4 beetles; 17 in East St. Louis; and only one in Highland Park where 122 were found in 1947.

DDT soil treatment was applied to 52 acres in Chicago.

Indiana. In 5 localities from 1 to 33 beetles were collected. DDT soil treatment was applied to 71 acres in four of these towns. Only 2 beetles were collected in Hammond. Soil treatment was applied here in 1947.

Michigan. From 6 to 172 beetles were collected in six towns where beetles had been collected in past years.

DDT and arsenate of lead soil treatments were applied in Detroit, and DDT soil treatment in Grand Rapids, Grosse Pointe Park, Grosse Pointe Village and Kalamazoo. A total of 222 acres was treated in these localities. DDT foliage treatment was also applied in Detroit. The sixth place was River Rouge with only 6 beetles, where treatments have been applied in the past.

Quarantined States. From one to numerous beetles were collected in the non-regulated areas of five of the quarantined states, one locality in Maine, 11 in New York, 24 in Ohio, 17 in Virginia, and 20 in West Virginia. In 516 localities in Maine, New Hampshire, New York, Ohio, Pennsylvania, Vermont,

Virginia and West Virginia, 1,366 plant-growing establishments and 46 additional areas were scouted, with beetles collected in three establishments in New York, 6 establishments in Ohio, 8 in Virginia and 6 in West Virginia. Most of these establishments are in the areas it is proposed to include in the Federal regulated areas.

Maine. Bar Harbor, with 7 beetles, was the only find in the nonregulated part of the State. Twenty-five beetles were collected in 1948, and DDT soil treatment was applied in 1947 when 40 beetles were found in Bar Harbor.

New York. Beetle collections were made in 11 localities, two in the northeastern section and the others in the western section of the State. DDT soil treatment was applied to 9 acres in Newark where 46 beetles were found. A small, local plant-growing establishment in Geneva, where 2 beetles were collected, operates under a signed state quarantine agreement with federal supervision.

It has been proposed to include additional area in Monroe, Tompkins and Warren Counties under the Federal regulated area. This will add the towns of Penfield, Perinton and Webster in Monroe County, the village of McLean in Tompkins County and the towns of Caldwell and Bolton in Warren County.

Ohio. One to numerous beetles were collected from 24 localities. Twenty-two areas were treated with DDT foliage spray and DDT soil treatment was applied to 60 acres on 6 plant-growing establishments in 4 towns and to small areas in Cincinnati. Plant-growing establishments in Brice, Cincinnati, Chesterland, Nashport, Newport and Painesville operate under signed state quarantine agreements, with Federal supervision. As areas around all finds, except Newport where numerous beetles were reported, were DDT foliage or DDT soil treated, it has been proposed to add only Newport Township, Washington County, to the Federal regulated area. This is across the Ohio River from the proposed regulated area in West Virginia. Local and State officials are planning to continue control trapping and treatments in Cincinnati in 1950.

Virginia. Beetle collections of from one to numerous were reported in 17 localities. Seven of these were first records. DDT foliage treatment was applied in 24 areas where beetles have been collected this year and past years; no soil treatments were applied this year. In several towns where beetles were collected in 1948, DDT foliage treatment was applied in 1949, but no trapping was done to determine beetle population.

The proposed addition to the Federal regulated area will include 10 of the localities referred to above and other areas where beetles have been found in past years. This will include the cities of Altavista, Bassett, Clifton Forge, Covington, Glade Spring and other towns where a few beetles were collected. Covesville, Galax, Ruckersville and Wytheville will be retreated with DDT foliage spray and other areas will be reinspected during 1950.

Twelve and four beetles were found, respectively, on two plant-growing establishments in Bedford and Sweet Briar, outside the proposed additions. These establishments operate under signed state quarantine agreements with Federal supervision.

West Virginia. Beetles were collected in 20 localities. From one to 144 beetles were reported as first-record finds in 9 localities. DDT foliage treatment was applied in Elkins, and DDT soil treatments were applied to 67 acres in five localities. Soil treatment will be continued in the spring of 1950 in Beckley, Huntington and Winona.

It has been proposed to extend the Federal regulated area to include the counties west of the present regulated area to the Ohio River and a small area around Elkins. This will include Elkins, Ellenboro, New Martinsville, St. Marys, Smithburg, West Union and 6 other localities where a few beetles were collected. Beckley, Bluefield, Gassaway and Huntington were soil treated with DDT in 1949. An extensive trap inspection program for 1950 is contemplated by the State Entomology Division. The State will add Hampshire County to the State regulated areas when the Federal extension becomes effective. This will include the towns of Okonoka, Romney and Three Churches, where numerous beetles were collected in 1948.

JAPANESE BEETLE SCOUT INSPECTION
OUTSIDE PRESENT REGULATED AREA
POSITIVE RESULTS AND TREATMENTS
1945 - 1949

<u>Locations</u>	<u>1949</u>	<u>1948</u>	<u>1947</u>	<u>1946</u>	<u>1945</u>
<u>FLORIDA</u>					
Eglin A.F. Airfield	0	0	0	1	-
Miami 36th St. Airport	0	-	4	3	0
Morrison Field					
West Palm Beach	0	-	1	-	-
<u>GEORGIA</u>					
Atlanta	31-F	22-F	26-F	17-F	13-S
Atlanta Airport	28-F	1	3	0	0
Augusta	-	0	-	3	1
Austell	22-F	4	1-F	2	1
Dahlonega	N-F	587-F	438-F	245-SF	37-S
Warner-Robins Field, Macon	0	0	1	0	-
Hunter Field, Savannah	0	1	1	0	1
Toccoa	-	-	-	0	1
<u>ILLINOIS</u>					
Chicago	62-S	86-S	81-S	165-S	164-S
*Decatur	4	-	-	-	-
East St. Louis	17	-	-	0	1
Highland Park	1	7	122-S	22-S	5
Lake Forest	-	-	1	1	-
Summit	-	0	1	-	-
<u>INDIANA</u>					
Elkhart	12-S	1	7-S	25-S	21-S
Fort Wayne	19-S	9	2	0	-
Gary	0	4-S	0	0	-
Hammond	2	3	5-S	1	0
Indianapolis	33-S	9-S	11	13-S	3
Richmond	1-S	17-S	1	2	-
South Bend	0	2	-	-	0
Terre Haute	-	0	0	1	-
Whiting	-	-	0	1	1
<u>IOWA</u>					
Fort Madison	-	-	0	1	-
<u>KANSAS</u>					
Kansas City	-	-	-	-	1
*Olathe Airbase	1	-	-	-	-
<u>KENTUCKY</u>					
Covington	1	-	-	-	-
*Dayton	1	-	-	-	-
*Shively	7-S	-	-	-	-
<u>LOUISIANA</u>					
New Orleans Airport	0	0	0	0	1

* First-records N-Numerous (over 500 no count taken) F-DDT Foliage Treatment S-DDT soil Treatment

<u>Locations</u>	<u>1949</u>	<u>1948</u>	<u>1947</u>	<u>1946</u>	<u>1945</u>
<u>MAINE</u>					
Bar Harbor	7	25	40-S	0	-
<u>MICHIGAN</u>					
Dearborn	0	0	3-S	-	0
Detroit	172-SF#	96-SF	N-S	12-S	24-S
Ecorse	0	0	-	0	6
Grand Rapids	9-S	58-S	39-S	92-S	166-S
Grosse Pointe Park	10-S	2	25-S	-	-
Grosse Pointe Village	16-S	44-S	-	-	-
Kalamazoo	11-S	4-S	4-S	10-S	63-S
Melvindale	0	0	-	1-S	1
Muskegon	-	-	0	1	7-S
Owosso	-	1-S	-	-	-
River Rouge	6	23-F	10-S	15-S	278-S
Wyandotte	0	-	0	1	-
<u>MISSOURI</u>					
*Bridgeton	1	-	-	-	-
*Robertson	2	-	-	-	-
St. Louis	26-S	54-S	8-S	51-S	7-S
Lambert Field, St. Louis	0	1	0	1-S	0
<u>NEW YORK</u>					
Batavia	-	0	0	0	2
Bath	-	-	-	2	-
*Bolton Landing	N	-	-	-	-
Dunkirk	-	0	1	-	0
Fairport	N	0	3	-	54-S
Falconer	3	53-F	144	93	10
Gardenville	-	0	0	0	1
Geneva	90	69-SF	165	-	94-S
Hammondsport	-	-	-	2	-
Jamestown	-	-S	14	-	7-S
Mexico	-	22	-	6	5
*McLean	23	-	-	-	-
Newark	46-S	126-F	N-S	16-S	-
Niagara Falls	10	46	19	3	-S
North Tonawanda	-	2	1	3	-
Ogdensburg	-	7	0	-	-
Penfield	N	-	-	-	-
*Perinton	N	-	-	-	-
Plattsburg	5	-	-	4	9
Rouses Point	-	-	-	4	-
Silver Creek	-	-	-	-	2
*Webster	N	-	-	-	-
Westfield	-	-	-	-	2
Williamson	-	0	0	17-S	-

* First-records N-Numerous (over 500
no count taken)

F-DDT Foliage Treatment S-DDT Soil
#-Lead arsenate used for Treatment
part of Detroit/treatment.
soil

<u>Locations</u>	<u>1949</u>	<u>1948</u>	<u>1947</u>	<u>1946</u>	<u>1945</u>
<u>NORTH CAROLINA</u> - The following localities are outside State regulated areas:					
Asheboro	-	-F	-	0	1
Boone	-	-	1	7	-
Burlington	-	10	15	-	0
Canton	-	0	0	1	1
Columbia	-	0	-	2	-
Durham	-	59-S	75-S	-	47-S
Elizabeth City	-	18	7	4	-
Fayetteville	-	5	0	1	-
Gastonia	-	35-S	55-S	4	-
Greenville	-	4	0	-	-
Hickory	-	0	6	0	-
Kannapolis	-	0	-	0	6
Landis	-	-	0	0	3
Lenoir	-	3	8	1	-
Mayodan	-	-	13	5	1
*Moyock	9	-	-	-	-
New Bern	-	3	0	-	-
Raleigh	-	200-S	52-S	7	-
Rocky Mount	-	10	0	9	5-S
West Jefferson	-	63-S	4	2	-
Wilson	-	7	2	-	8-S
<u>OHIO</u>					
Ashland	-	0	0	0	1
Athens	1-F	-	-	-	-
Bellevue	9-F	13-F	2-F	-	84-S
Belpre	N-F	441-F	60-F	11	32
*Brice	1-S	-	-	-	-
Bucyrus	6-F	4-F	0	1	-
Caldwell	26-F	18-F	0	-	-
Chardon	2-F	2-F	-	0	-
*Chesterland	2-S	-	-	-	-
Chillicothe	17-F	12-F	4-F	-	0
Cincinnati	N-SF	N-SF	0	-	0
Crestline	19-F	4-F	1-F	-	11-S
Elyria	21-F	13-F	1-F	-	8-S
Patterson Field, Fairfield	0	2-F	0	0	-
Gallipolis	N-F	N-F	14-F	-	40-S
Geneva	-F	27-F	10-F	7	54-S
Hamilton	0	1-F	0	2	1
Kinsman	-	-	0	1	-
Lima	-	0	1-F	-	-
Lorain	2-F	-F	0	-	2-S
Loudonville	91-F	169-F	12-F	-	3-S
Marion	0	-F	1-F	-	0
Maumee	-	0	0	1	-
McConnelsville	-	1-F	-	-	-
Millersburg	29-F	28-F	-	-	0
Mt. Vernon	21-F	14-F	1-F	-	0

* First-record	N-Numerous (over 500 no count taken)	F-DDT Foliage Treatment	S-DDT Soil Treatment
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<u>Location</u>	<u>1949</u>	<u>1948</u>	<u>1947</u>	<u>1946</u>	<u>1945</u>
<u>OHIO (Continued)</u>					
*Nashport	1-S	-	-	-	-
New Concord	45-F	20-F	0	-	26-S
*Newport	N	-	-	-	-
*Osborne	4-F	-	-	-	-
Painesville	5-F	6-SF	33-S	32-S	11-S
Perry	0	-SF	5-S	-	-
Sandusky	*	1-F	-	-	-
Sharon Township	-	-	10-S	-	-
South Zanesville	11-F	20-F	0	-	4-S
Springfield	0	1-F	-	0	1
Willard	13-F	17-F	0	-	5-S
Zanesville	-F	-F	0	-	0
<u>SOUTH CAROLINA</u>					
Charleston Airport	0	0	0	1	3
Chesnee	-	-	1-F	-	-
Columbia	-	0	-	0	1
Greenville	-	-	-	6	25
Greenville Airbase	-	0	1-F	6	-
<u>TENNESSEE</u>					
Bristol	6	0	-	0	-
Knoxville	0	1	-	0	-
Memphis Airport	0	1	-	0	2
Mountain City	-	-	0	2	-
Nashville Airport	0	0	1	1	-
<u>VIRGINIA</u>					
Altavista	N-F	N-F	N-F	-	9-S
Amherst	-F	18-F	6-F	2	-
Appomattox	-F	6	-	-	-
*Bassett	N-F	-	-	-	-
Bedford	12-F	263-F	18-F	2	1
*Blacksburg	1	-	-	-	-
Blackstone	-	1	-	-	0
Bridgewater	-	-	-	-	1
Bristol	14	0	-	0	-
Broadway	-	-	0	8	-
Cartersville	-	1	-	-	-
Chase City	-	1	-	0	-
*Chilhowie	2	-	-	-	-
Clifton Forge	N	-F	105-F	-	16-S
*Covesville	63-F	-	-	-	-
Covington	-	-F	N-F	-S	83-S
Crewe	-F	16-F	-	-	0
Crozet	-F	5-F	-F	9-S	-
*Dalesville	4	-	-	-	-
Dayton	-F	-	8	2	4
*Earleysville	10	-	-	-	-
Edinburg	-F	4	-	-	0
Elkton	-F	7	-	-	0
Farmville	-	2	-	-	0

* First-record N-Numerous (over 500
no count taken)

F-DDT Foliage Treatment

S-DDT Soil
Treatment

<u>Locations</u>	<u>1949</u>	<u>1948</u>	<u>1947</u>	<u>1946</u>	<u>1945</u>
<u>VIRGINIA (Continued)</u>					
Galax	N-F	0	-	0	1
Glade Spring	N-F	39	-	-	-
Gretna	-	1	-	-	-
Harrisonburg	-F	54-F	0	8	2
Independence	-	-	1	0	-
Lovingston	-F	-F	89-F	5	-
Luray	-F	7	-	-	-
Madison	-	-	0	10	-
Marion	10	0	-	2	-
Mt. Jackson	-	-	1	-	0
New Market	-	1	0	-	-
Roanoke County	7	-	-	-	-
Rocky Mount	-	-	3	1	2
Ruckersville	N-F	12	-	-	-
Scottsville	-F	5	-	-	-
South Hill	-	2	0	0	-
Staunton	-F	143-F	-	-	-
Strasburg	-F	11-F	-	-	0
*Sweet Brier	4	-	-	-	-
Victoria	-F	119-F	-	-	-
Waynesboro	-F	222-F	1	-	-
Woodstock	-F	17-F	0	-	-
Wytheville	94-F	0	13-F	-	4-S
<u>WEST VIRGINIA</u>					
*Beaver	6	-	-	-	-
Beckley	138-S	-	-	-	-
Bluefield	37-S	-	-	-	-
*Cairo	9	-	-	-	-
Elkins	N-F	N	-	12	-
*Ellenboro	72	-	-	-	-
Gassaway	91-S	-	-	10	3
*Harding	9	-	-	-	-
*Harrisville	1	-	-	-	-
Huntington	94-S	8	36	0	5
*Middlebourne	5	-	-	-	-
*New Martinsville	55	-	-	-	-
Okonoko	-	N	-	-	-
Pennsboro	19	-	-	1	-
Petersburg	65	N	-	23	-
Romney	-	N	-	6	-
St. Marys	202	-	-	2	-
*Smithburg	145	-	-	-	-
*Smithfield	2	-	-	-	-
Three Churches	-	N	-	-	-
West Union	53	N	3	-	-
White Sulphur Springs	3-S	-	-	-	-
Winona	21	-	-	-	-

* First-record N-Numerous (over 500
no count taken)

F-DDT Foliage Treatment

S-DDT Soil
Treatment

